1.0 PROJECT TITLE:

Transition and Long-Term Sustainment of RESA Software Baseline

2.0 SUMMARY:

MIT Lincoln Laboratory (MIT-LL) seeks a transition partner for long-term software sustainment, migration to new technologies and potential feature enhancement of our Realtime Enhanced Situation Awareness (RESA) software baseline. RESA is installed at various off-premise facilities. The software sustainment tasks we’re looking for a partner to perform include periodic updates to data-feed formats, incorporation of new data sources, and occasional patches to address newly discovered vulnerabilities. This sustainment contract also offers the potential to incorporate value-added processing algorithms to provide novel data to decision makers.

3.0 BACKGROUND:

MIT-LL is helping our sponsors in realize their vision of an Open Architecture information infrastructure that reaches across all levels of its data enterprise. In this context, an open architecture has many benefits. It allows for rapid deployment of capabilities vs. large infrequent software upgrades; it reduces costs due to leveraging of open-source-software components, and it lowers barrier to entry, which empowers non-traditional DoD contractors to provide best-of-breed solutions. This is achieved in part by utilizing an event-driven service-oriented architecture (SOA) based on a standard XML message format.

MIT-LL builds and deploys software systems to sites in support of program-based events and demonstrations. These software systems connect to and authenticate with a variety of data sources, subscribe for published data, filter and route the data to various endpoints for consumption. Endpoint data requirements may require filtering or format translation to meet the needs of the consumer.

Currently MIT-LL deploys an in-house-developed Apache Tomcat web application RESA to support data subscription, transformation, and routing tasks. We seek to transition maintenance and support of this software baseline to a long-term sustainment contract. In addition, it is anticipated that the Transition Partner would collaborate with MIT-LL to update the current RESA software baseline with a more flexible technology, such as Niagara Files (NiFi) or other similar technologies. The Transition Partner would reference MIT-LL’s existing data-format transformation code where possible, writing new parsers when necessary, and utilizing available open-source plugins where applicable.

Transition partners must complete this work using staff composed exclusively of US Citizens, due to data handling restrictions. Expertise in Java, Apache Tomcat web applications, XML processing and streaming data is required.